

VILLAGE POWER 2000

December 4 - 8, 2000

Clean Water Delivery.

Thursday, December 7.

Community Rope Pumps in Nicaragua;
a Private Sector Approach

By: Henk Alberts.

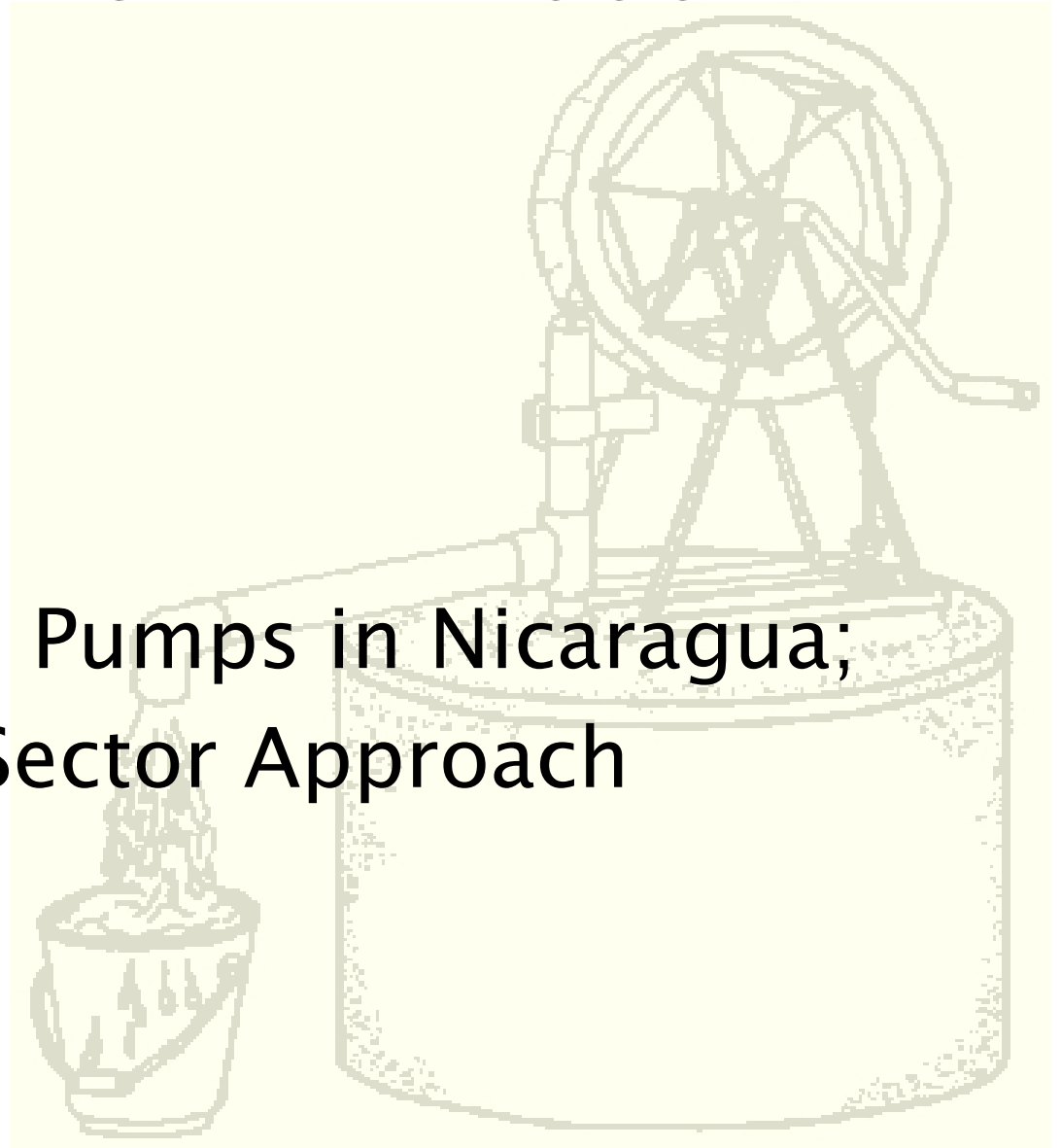
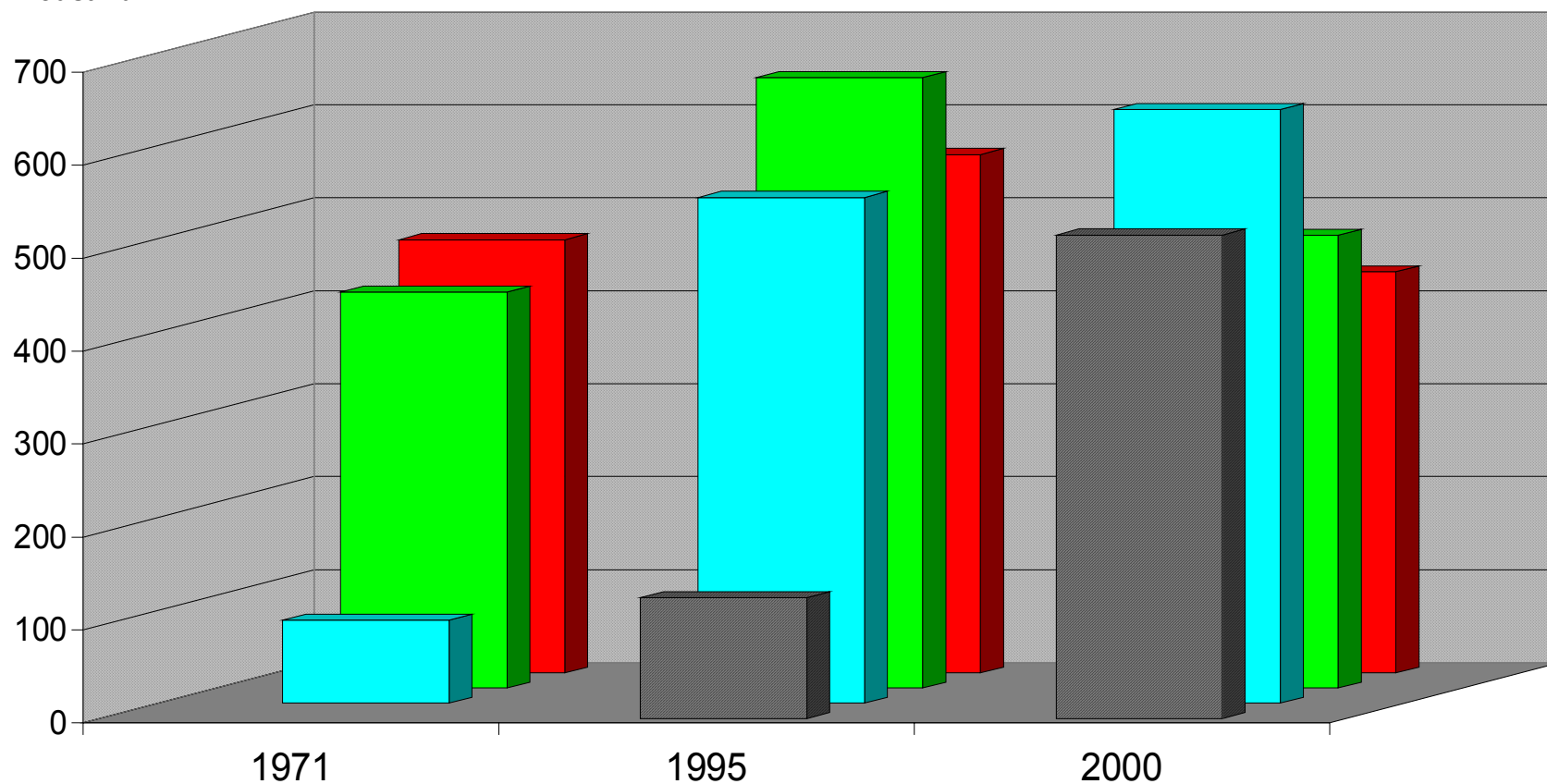


Figure 2

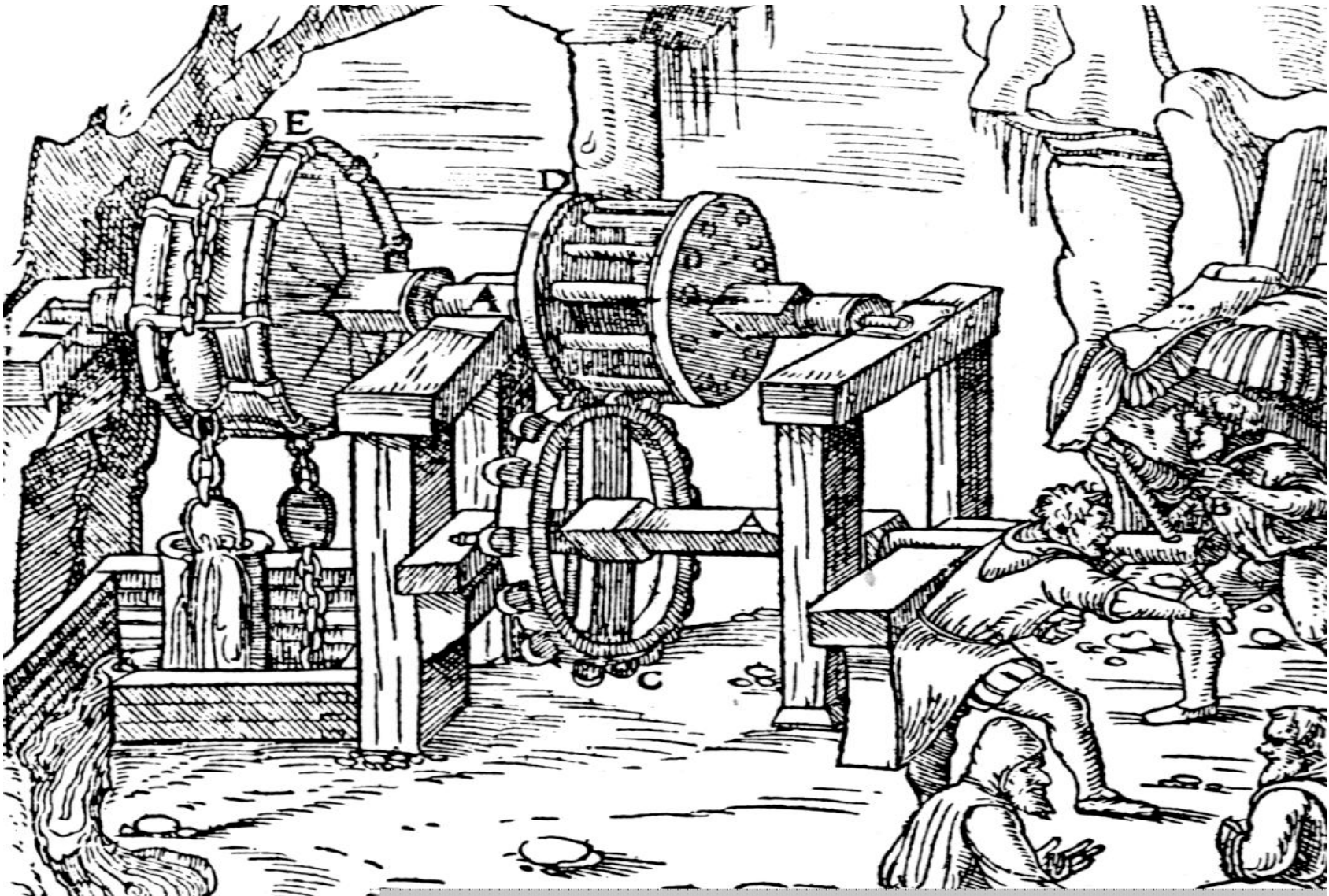
Water Sources, Rural Nicaragua

Population
X Thousand



- Rope Pumps
- Waterpiped system in or outside the houses
- Handdug well
- Rivers, Streams or Surface water

Figure 3



16th Century Chain and Washer Pump

Figure 4

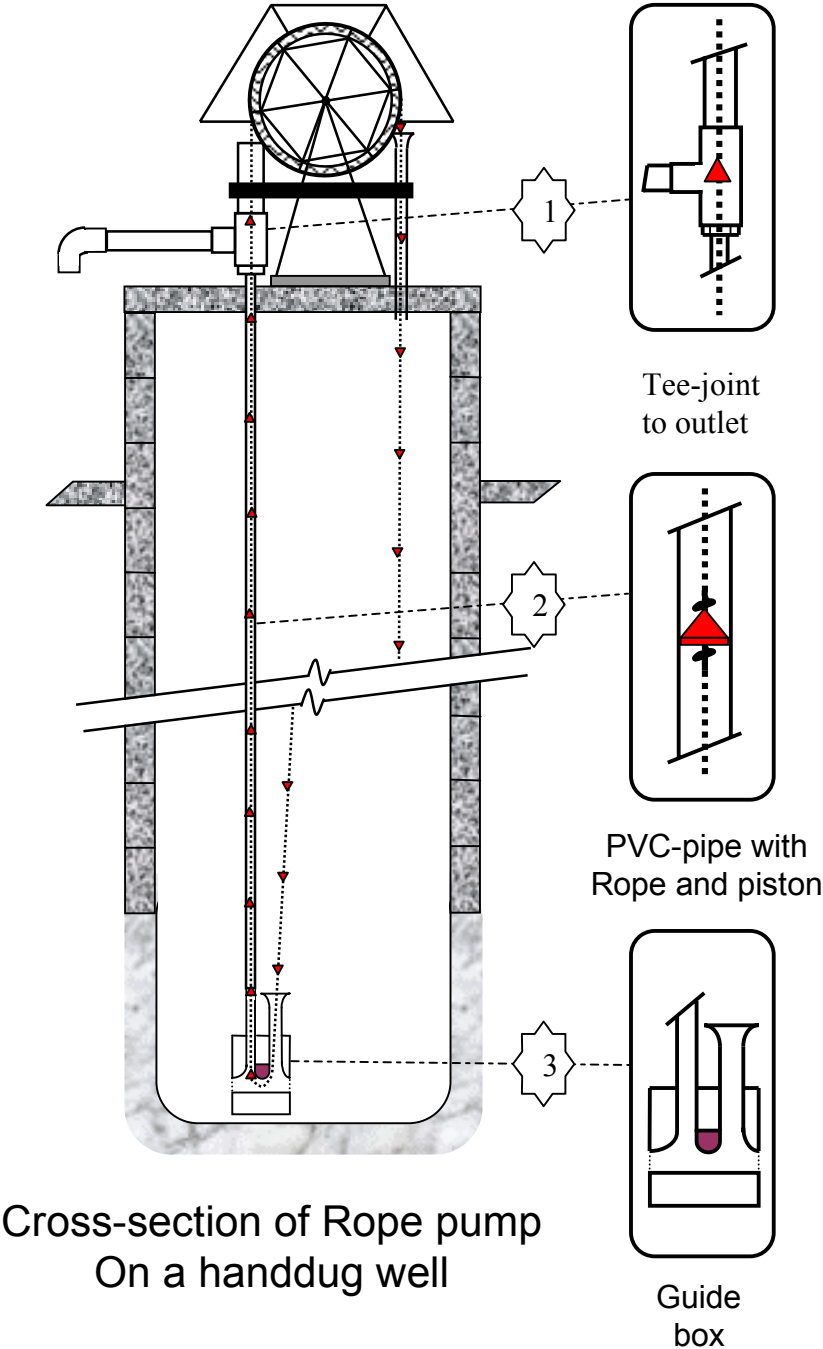
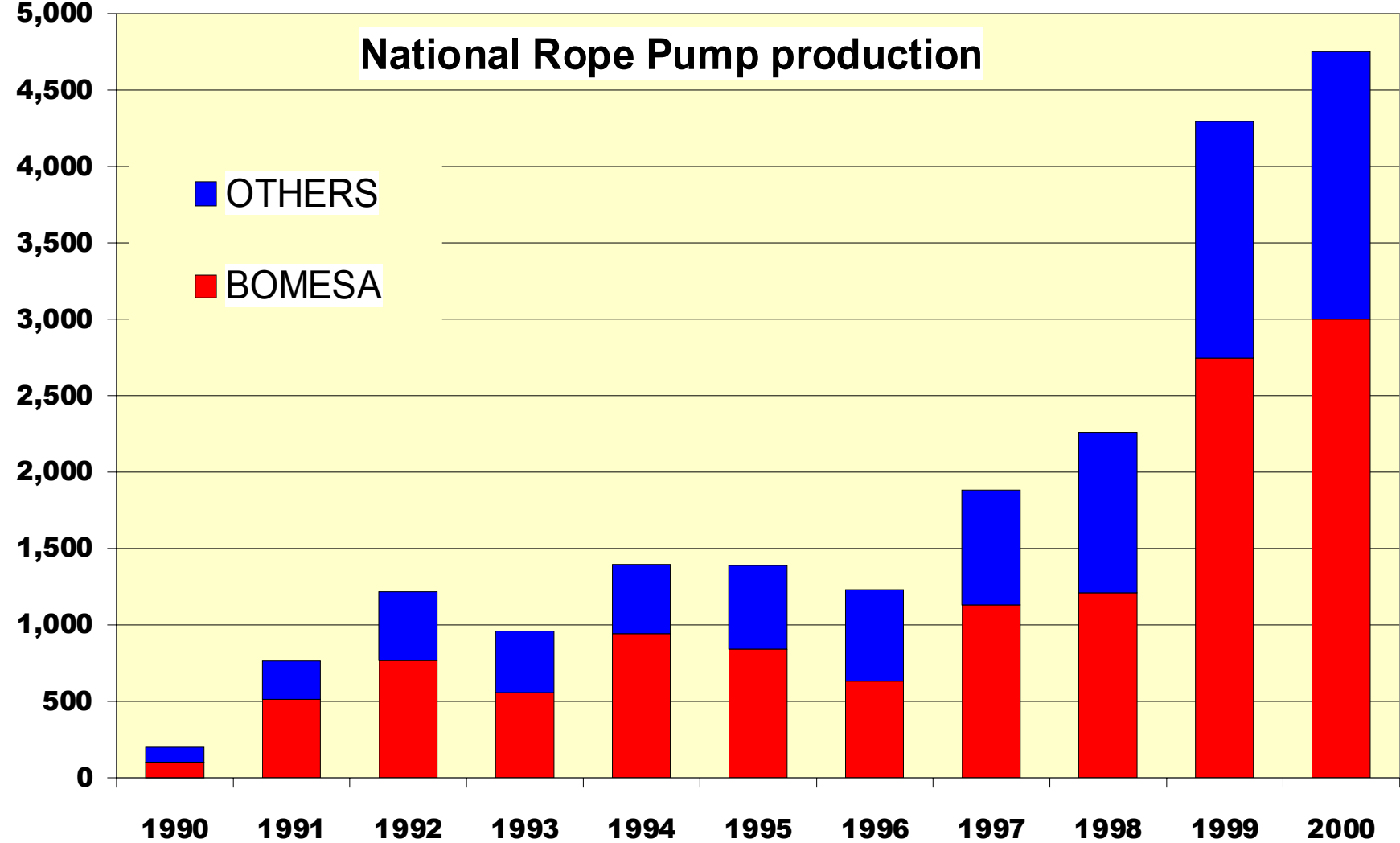


Figure 5



FAVOURABLE CHARACTERISTICS.

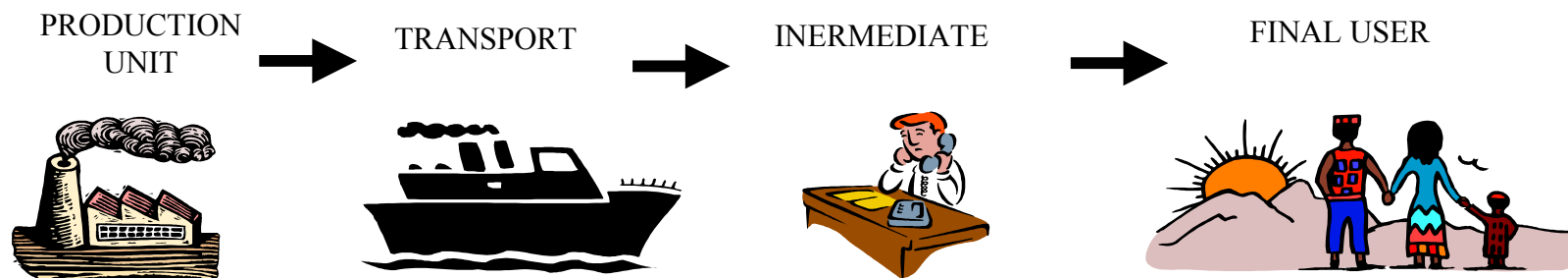
- High social acceptance.
- High efficiency and availability.
- Easy installation, repair or maintenance. (By users themselves).
- Local production and availability of spare parts.
- Applicable up to 60 meters depth in handdug wells or boreholes.
- Low cost, starting at 70 US\$ for the family rope pump.

International results of the Technology Transfer

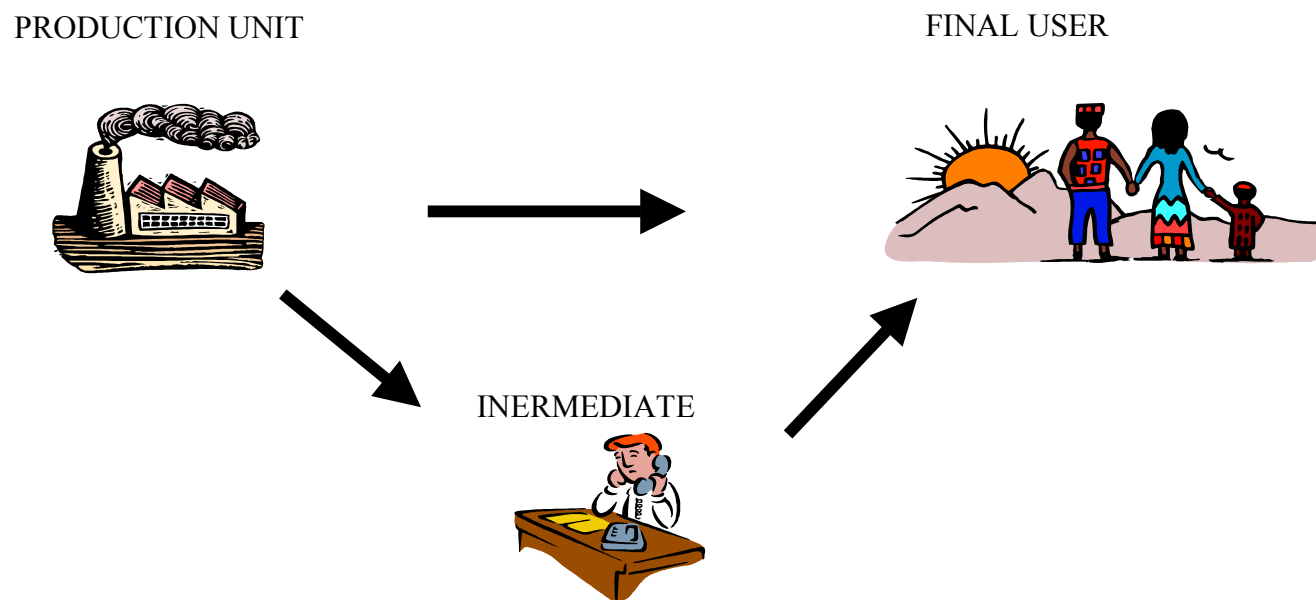
- Honduras: Local production unit; 2000 pumps installed.
- El Salvador: 2000 pumps installed, mainly imported from Nicaragua.
- Ecuador: Several hundreds installed, started around 1993.
- Laos: Several dozens local made and installed. Selection process of workshops in progress.
- Madagascar: Three pumps installed.
- Angola: Three pumps installed or to be installed.
- Zambia: Six pumps. Four installed.
- Ghana: 100 pumps locally produced and installed. (WSP initiative).
- ROPE PUMP POLICY WORKSHOP to be held in Nicaragua May 2001. Convoled by the Hand Pump Technology Network (HTN).

Figure 8

TRADITIONAL HANDPUMP “SUPPLY CHAIN”



ROPE PUMP “SUPPLY CHAIN”



The Ghana initiative.

The four actors are:

CWSA	Community Water and Sanitation Agency (Ghana)
WSP	Water and Sanitation Programme (UNDP/World Bank)
Private Sector	Two workshops in Ghana
Private sector	Rope pump firm in Nicaragua.

Programme:

Preparatory	Reconnaissance mission top Ghanaian W&S sector to Nicaragua
Phase 1.	Technical assistance and Selection workshops in Ghana
Phase 2	Training technicians in Nicaragua
Phase 3.	Production and installation Quality control.

Results:	One hundred pumps installed. Technical capacity to produce rope pumps in Ghana.
----------	--

The perfect success story